Your wildcard search against 2000 terms has yielded the results below Search for additional matches among the next 2000 terms

starting with: CELL\$(CELLOSKIN).P28-P88,P90-P91,P23-P27,P20-P22,P1-P18,P19-P19.

Search Results -

	Documents
AAV near5 retrovir\$ near5 vector\$ and packaging near cell\$	30

US Patents Full-Text Database US Pre-Grant Publication Full-Text Database JPO Abstracts Database EPO Abstracts Database Derwent World Patents Index Database: IBM Technical Disclosure Bulletins

Refine Search:			Ī₹	Clear	
Search History					

Today's Date: 11/7/2001

DB Name	<u>Query</u>	Hit Count	Set Name
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	AAV near5 retrovir\$ near5 vector\$ and packaging near cell\$	30	<u>L7</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	AAV near5 retrovir\$ near5 vector\$ near10 packaging	0	<u>L6</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	AAV near5 retrovir\$ near5 vector\$	81	<u>L5</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	adenovir\$ near5 vector\$ near10 retrovir\$	1731	<u>L4</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and packaging	1	<u>L3</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and packaging near cell\$	0	<u>L2</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	5650309 [pn]	3	<u>L1</u>

WEST

Your wildcard search against 2000 terms has yielded the results below

Search for additional matches among the next 2000 terms

Generate Collection

Search Results - Record(s) 1 through 30 of 30 returned.

1. Document ID: US 20010031462 A1

L7: Entry 1 of 30

File: PGPB

Oct 18, 2001

PGPUB-DOCUMENT-NUMBER: 20010031462

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010031462 A1

TITLE: Novel compositions and methods of screening for B cell

activity modulators

PUBLICATION-DATE: October 18, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE COUNTRY

RULE-47

Glynne, Richard

Palo Alto

CA

Goodnow, Chris

Ainslie, ACT

CA AU

Mack, Davis

Menlo Park

US

US

US-CL-CURRENT: 435/4; 536/24.1

Full Title Citation Front Review Classification Date Reference Claims KMC Draw Desc Image

2. Document ID: US 20010016192 A1

L7: Entry 2 of 30

File: PGPB

Aug 23, 2001

PGPUB-DOCUMENT-NUMBER: 20010016192

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010016192 A1

TITLE: RECOMBINANT ADENOVIRAL VECTOR AND METHOD OF USE

PUBLICATION-DATE: August 23, 2001

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

GREGORY, RICHARD J. CARLSBAD CA US WILLS, KEN N. ENCINITAS CA US MANEVAL, DANIEL C. SAN DIEGO CA US

US-CL-CURRENT: 424/93.2; 424/93.6, 435/320.1, 435/455, 435/456, 435/69.1

Full Title Citation Front Review Classification Date Reference Claims MMC Draw Desc Image

3. Document ID: US 20010006950 A1

L7: Entry 3 of 30 File: PGPB

Jul 5, 2001

PGPUB-DOCUMENT-NUMBER: 20010006950 PGPUB-FILING-TYPE: new-utility

DOCUMENT-IDENTIFIER: US 20010006950 A1

TITLE: GENETIC VACCINE VECTOR ENGINEERING

PUBLICATION-DATE: July 5, 2001

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

PUNNONEN, JUHA PALO ALTO CA US STEMMER, WILLEM P.C. LOS GATOS CA US WHALEN, ROBERT G. PARIS CA FR HOWARD, RUSSELL LOS ALTOS HILLS US

US-CL-CURRENT: 514/44; 435/320.1

Full Title Citation Front Review Classification Date Reference Claims 1900 Draw Desc Image

4. Document ID: US 20010006629 A1

L7: Entry 4 of 30 File: PGPB Jul 5, 2001

PGPUB-DOCUMENT-NUMBER: 20010006629

PGPUB-FILING-TYPE: new-utility DOCUMENT-IDENTIFIER: US 20010006629 A1

TITLE: RECOMBINANT ADENOVIRAL VECTOR AND METHODS OF USE

PUBLICATION-DATE: July 5, 2001

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

GREGORY, RICHARD J. CARLSBAD CA US

WILLS, KEN N. ENCINITAS CA US MANEVAL, DANIEL C. SAN DIEGO CA US

US-CL-CURRENT: 424/93.1; 424/93.2, 424/93.6, 435/320.1, 514/44

Full Title Citation Front Review Classification Date Reference

KNMC Draw Desc Image

5. Document ID: US 6312957 B1

L7: Entry 5 of 30 File: USPT Nov 6, 2001

US-PAT-NO: 6312957

DOCUMENT-IDENTIFIER: US 6312957 B1

TITLE: Genetic modification of primate hemopoietic repopulating

stem cells

DATE-ISSUED: November 6, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Einerhand; Markus Peter Amsterdam NLX

Wilhelmus

Valerio; Domenico Leiden NLX

US-CL-CURRENT: 435/456; 435/440

Full Title Citation Front Review Classification Date Reference RWIC Drain Desc Image

☐ 6. Document ID: US 6312683 B1

L7: Entry 6 of 30 File: USPT Nov 6, 2001

DOCUMENT-IDENTIFIER: US 6312683 B1

TITLE: Equine infectious anemia virus vectors

DATE-ISSUED: November 6, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Kingsman; Alan John Oxon GBX
Carroll; Miles William Oxon GBX
Rohll; Jonathan Berkshire GBX
Mitrophanous; Kyriacos Oxford GBX
Kim; Narry Seoul KRX

US-CL-CURRENT: 424/93.2; 424/93.1, 424/93.21, 424/93.6, 435/320.1, 435/325, 435/455, 435/69.1, 514/44, 536/23.1

Full Title Citation Front Review Classification Date Reference

MMC Draw Desc Image

7. Document ID: US 6306650 B1

L7: Entry 7 of 30

File: USPT

Oct 23, 2001

US-PAT-NO: 6306650

DOCUMENT-IDENTIFIER: US 6306650 B1

TITLE: Nucleic acid molecule encoding a .beta.-erythroid kruppel-like factor that binds to a .delta.-globin promoter

DATE-ISSUED: October 23, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Townes; Tim M. Birmingham AL Donze; David Silver Spring MD

US-CL-CURRENT: 435/325; 435/243, 435/320.1, 435/410, 536/23.5

ob ch commit. 432/322, 132/222, 132/122, 232/222

Full | Title | Citation | Front | Review | Classification | Date | Reference |

10MC Draw Desc Image

8. Document ID: US 6300485 B1

L7: Entry 8 of 30

File: USPT

Oct 9, 2001

DOCUMENT-IDENTIFIER: US 6300485 B1

TITLE: Myosin IXa and cyclic nucleotide gated channel-15

(CNGC-15) polynucleotides, polypeptides, compositions, methods,

and uses thereof

DATE-ISSUED: October 9, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Adams; Arwen E. Oakland CA
Chiu; Choi Ying Castro Valley CA
Duhl: David Oakland CA

Duhl; David Oakland CA

Gorman; Susan W. Santa Monica CA Leng; Song Castro Valley CA

Sheffield; Val Iowa City IA Welch; Juliet Kensington CA

US-CL-CURRENT: 536/23.1; 536/23.4, 536/24.1, 536/24.31

Full Title Citation Front Review Classification Date Reference

KMC Draw Desc Image

9. Document ID: US 6210939 B1

L7: Entry 9 of 30

File: USPT

Apr 3, 2001

US-PAT-NO: 6210939

DOCUMENT-IDENTIFIER: US 6210939 B1

TITLE: Recombinant adenoviral vector and methods of use

DATE-ISSUED: April 3, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Gregory; Richard J. Carlsbad CA
Wills; Ken N. Encinitas CA
Maneval; Daniel C. San Diego CA

US-CL-CURRENT: 435/456; 435/252.3, 435/320.1, 435/363, 435/366, 435/370, 435/371

Full Title Citation Front Review Classification Date Reference

FMC Draw Desc Image

10. Document ID: US 6207455 B1

L7: Entry 10 of 30

File: USPT

Mar 27, 2001

DOCUMENT-IDENTIFIER: US 6207455 B1

TITLE: Lentiviral vectors

DATE-ISSUED: March 27, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Chang; Lung-Ji

Gainesville

FL

32606-6939

US-CL-CURRENT: 435/457; 435/320.1, 435/325, 435/363, 435/366, <u>435/368</u>, <u>435/369</u>, <u>435/370</u>, <u>435/371</u>, <u>435/372</u>, <u>435/455</u>, <u>435/456</u>

Full Title Citation Front Review Classification Date Reference

MMC Draw Desc Image

11. Document ID: US 6197754 B1

L7: Entry 11 of 30

File: USPT

Mar 6, 2001

US-PAT-NO: 6197754

DOCUMENT-IDENTIFIER: US 6197754 B1

TITLE: Suppression of tumor growth by a mini-E1A gene

DATE-ISSUED: March 6, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Hung; Mien-Chie

Chen; Hua

Houston Houston

TX TX

Yu; Di-hua

Houston TX

US-CL-CURRENT: 514/44; 424/450, 424/93.2, 424/93.6

Full Title Citation Front Review Classification Date Reference

EVMC Draw Desc Image

12. Document ID: US 6187757 B1

L7: Entry 12 of 30

File: USPT

Feb 13, 2001

DOCUMENT-IDENTIFIER: US 6187757 B1

TITLE: Regulation of biological events using novel compounds

DATE-ISSUED: February 13, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

MA

Clackson; Timothy P. Cambridge

Gilman; Michael Z. Newton MA
Holt; Dennis A. Royersford PA
Keenan; Terence P. Cambridge MA

Keenan; Terence P. Cambridge MA Rozamus; Leonard Bedford MA

Yang; Wu Plainsboro NJ

US-CL-CURRENT: 514/31; 435/325, 435/355, 435/372, 435/372.3,

<u>435/375</u>

Full Title Citation Front Review Classification Date Reference

1000C Draw Desc Image

13. Document ID: US 6171855 B1

L7: Entry 13 of 30 File: USPT Jan 9, 2001

US-PAT-NO: 6171855

DOCUMENT-IDENTIFIER: US 6171855 B1

TITLE: Vectors

DATE-ISSUED: January 9, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Askari; Frederick K. Ann Arbor MI

US-CL-CURRENT: 435/320.1; 435/325, 435/455, 435/70.1, 536/24.1

Full Title Citation Front Review Classification Date Reference MMC Draw Desc Image

14. Document ID: US 6140484 A

L7: Entry 14 of 30 File: USPT Oct 31, 2000

DOCUMENT-IDENTIFIER: US 6140484 A

TITLE: Bax .omega. protein and methods

DATE-ISSUED: October 31, 2000

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Bitler; Catherine

Mastroni

Menlo Park

CA

Bowersox; Stephen Scott Menlo Park

CA

Crea; Roberto

San Mateo

CA

Demo; Susan Dunham

San Francisco CA San Diego

CA

Horne; William A. Zhou; Mei

Palo Alto

CA

US-CL-CURRENT: 536/23.1; 435/320.1

Full Title Citation Front Review Classification Date Reference

iOMC Draw Desc Image

15. Document ID: US 6117680 A

L7: Entry 15 of 30

File: USPT

Sep 12, 2000

US-PAT-NO: 6117680

DOCUMENT-IDENTIFIER: US 6117680 A

TITLE: Compositions and methods for regulation of transcription

DATE-ISSUED: September 12, 2000

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Natesan; Sridaran

Chestnut Hill

Gilman; Michael Z. Newton

MA MA

US-CL-CURRENT: 435/455; 435/235.1, 435/320.1, 435/325, 435/456, 536/23.4

Full Title Citation Front Review Classification Date Reference

KNMC Draw Desc Image

16. Document ID: US 6110702 A

L7: Entry 16 of 30

File: USPT

Aug 29, 2000

DOCUMENT-IDENTIFIER: US 6110702 A

TITLE: PSA positive regulating (PSAR) sequences and uses

thereof

DATE-ISSUED: August 29, 2000

INVENTOR - INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Pang; Shen

Belldegrun; Arie S.

Van Nuys CA

Los Angeles CA

US-CL-CURRENT: 435/69.1; 435/320.1, 435/455, 435/466, 435/70.1,

536/24.1

Full Title Citation Front Review Classification Date Reference

KWMC Draw Desc Image

☐ 17. Document ID: US 6110666 A

L7: Entry 17 of 30

File: USPT

Aug 29, 2000

US-PAT-NO: 6110666

DOCUMENT-IDENTIFIER: US 6110666 A

TITLE: Locus control subregions conferring integration-site independent transgene expression abstract of the disclosure

DATE-ISSUED: August 29, 2000

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Grosveld; Franklin Gerardus Rotterdam

m----

NLX

Ellis; James

Toronto

CAX

Kioussis; Dimitris

London

GBX

US-CL-CURRENT: 435/6

Full Title Citation Front Review Classification Date Reference

EMMC Draw Desc Image

☐ 18. Document ID: US 6037177 A

L7: Entry 18 of 30

File: USPT

Mar 14, 2000

DOCUMENT-IDENTIFIER: US 6037177 A

TITLE: Method for increasing the efficiency of recombinant AAV

production

DATE-ISSUED: March 14, 2000

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Snyder; Richard

Oakland CA

US-CL-CURRENT: 435/455; 435/320.1, 435/354, 435/357, 435/365,

435/366, 435/369

Full Title Citation Front Review Classification Date Reference

KNMC Draw Desc Image

19. Document ID: US 5972899 A

L7: Entry 19 of 30

File: USPT

NY

Oct 26, 1999

US-PAT-NO: 5972899

DOCUMENT-IDENTIFIER: US 5972899 A

TITLE: Apoptosis induced by Shigella IpaB

DATE-ISSUED: October 26, 1999

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Zychlinsky; Arturo New York

Chen; Yajing

Elmhurst NY

US-CL-CURRENT: 514/44; 424/93.2, 435/320.1, 435/455

Full Title Citation Front Review Classification Date Reference

MMC Draw Desc Image

20. Document ID: US 5962320 A

L7: Entry 20 of 30

File: USPT

Oct 5, 1999

DOCUMENT-IDENTIFIER: US 5962320 A

TITLE: Engineered antigen presenting cells and methods for

their use

DATE-ISSUED: October 5, 1999

INVENTOR - INFORMATION:

NAME

CITY STATE ZIP CODE COUNTRY

Robinson; William S. Burlingame CA

US-CL-CURRENT: 435/366; 424/93.21, 435/325

Full Title Citation Front Review Classification Date Reference

1000C Draw Desc Image

21. Document ID: US 5958768 A

L7: Entry 21 of 30

File: USPT

Sep 28, 1999

COUNTRY

US-PAT-NO: 5958768

DOCUMENT-IDENTIFIER: US 5958768 A

TITLE: Chimeric antiviral agents comprising Rev binding nucleic acids and trans-acting ribozymes, and molecules encoding them

DATE-ISSUED: September 28, 1999

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE

Kraus; Gunter Miami FL Wong-Staal; Flossie San Diego CA

Yu; Mang San Diego CA

Yamada; Osamu Kobe JPX

US-CL-CURRENT: 435/372.3; 435/320.1, 435/325, 435/366, 435/455,

536/24.5

Full Title Citation Front Review Classification Date Reference

KMC Draw Desc Image

22. Document ID: US 5948640 A

L7: Entry 22 of 30

File: USPT

Sep 7, 1999

DOCUMENT-IDENTIFIER: US 5948640 A

TITLE: Mammalian additional sex combs (mammalian Asx) acts as a

tumor suppressor

DATE-ISSUED: September 7, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Randazzo; Filippo M. Emeryville CA

US-CL-CURRENT: 435/69.1; 435/320.1, 435/325, 435/455, 536/23.1

Full Title Citation Front Review Classification Date Reference (OMC Draw Desc Image)

23. Document ID: US 5932210 A

L7: Entry 23 of 30 File: USPT Aug 3, 1999

US-PAT-NO: 5932210

DOCUMENT-IDENTIFIER: US 5932210 A

TITLE: Recombinant adenoviral vector and methods of use

DATE-ISSUED: August 3, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Gregory; Richard J. Carlsbad CA Wills; Ken N. Encinitas CA

Maneval; Daniel C. San Diego CA

US-CL-CURRENT: 424/93.2; 424/93.6, 435/320.1

Full Title Citation Front Review Classification Date Reference (MMC Draw Desc Image)

24. Document ID: US 5914266 A

L7: Entry 24 of 30 File: USPT Jun 22, 1999

DOCUMENT-IDENTIFIER: US 5914266 A

TITLE: Mammallian sex comb on midleg (mammalian SCM) acts as a

tumor suppressor

DATE-ISSUED: June 22, 1999

INVENTOR - INFORMATION:

NAME

CITY STATE ZIP CODE COUNTRY

Randazzo; Filippo Emeryville CA

US-CL-CURRENT: 435/320.1; 536/23.1

Full Title Citation Front Review Classification Date Reference

1000C Draw Desc Image

25. Document ID: US 5874556 A

L7: Entry 25 of 30

File: USPT

Feb 23, 1999

US-PAT-NO: 5874556

DOCUMENT-IDENTIFIER: US 5874556 A

TITLE: Hybrid genes for use in the production of T.sub.H

-independent cytotoxic T cells

DATE-ISSUED: February 23, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Lupton; Stephen D. Seattle WA Allen; James M. Seattle WA Feldhaus; Andrew L. Lynwood WA

US-CL-CURRENT: 536/23.1; 424/93.21, 424/93.71, 435/252.3, 435/320.1, 435/363, 435/366, 435/372, 435/372.3, 435/69.1, 435/69.5, 435/69.52, 435/69.7, 536/23.4, 536/23.52

Full Title Citation Front Review Classification Date Reference

EMMC Draw Desc Image

26. Document ID: US 5830755 A

L7: Entry 26 of 30

File: USPT

Nov 3, 1998

DOCUMENT-IDENTIFIER: US 5830755 A

TITLE: T-cell receptors and their use in therapeutic and

diagnostic methods

DATE-ISSUED: November 3, 1998

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Nishimura; Michael Rockville MD Rosenberg; Steven A. Potomac MD

US-CL-CURRENT: 435/325; 424/93.2, 435/320.1, 435/6, 435/69.1, 435/7.23, 530/387.7, 536/23.1

Full Title Citation Front Review Classification Date Reference

KWWC Draw Desc Image

RWIC Draw Desc Image

27. Document ID: US 5780447 A

L7: Entry 27 of 30

File: USPT

Jul 14, 1998

US-PAT-NO: 5780447

DOCUMENT-IDENTIFIER: US 5780447 A

TITLE: Recombinant adeno-associated viral vectors

DATE-ISSUED: July 14, 1998

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Nienhuis; Arthur W. Memphis TN

US-CL-CURRENT: 514/44; 424/93.2, 424/93.21, 435/320.1, 435/325, 435/375, 435/456, 435/457

Full Title Citation Front Review Classification Date Reference

☐ 28. Document ID: US 5770690 A

L7: Entry 28 of 30

File: USPT

Jun 23, 1998

DOCUMENT-IDENTIFIER: US 5770690 A

TITLE: Bax omega protein and methods

DATE-ISSUED: June 23, 1998

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Bitler; Catherine Menlo Park CA

Mastroni Mellio Faik CA

Bowersox; Stephen Scott Menlo Park CA

Crea; Roberto San Mateo CA

Demo; Susan Dunham San Francisco CA

Horne; William A. San Diego CA

Zhou; Mei Palo Alto CA

US-CL-CURRENT: 530/324; 530/329, 530/350

Full Title Citation Front Review Classification Date Reference

1000 Draw Desc Image

29. Document ID: US 5747292 A

L7: Entry 29 of 30 File: USPT May 5, 1998

US-PAT-NO: 5747292

DOCUMENT-IDENTIFIER: US 5747292 A

TITLE: Chimeric cytokine receptors in lymphocytes

DATE-ISSUED: May 5, 1998

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Greenberg; Philip D. Mercer Island WA

Nelson; Brad H. Seattle WA

US-CL-CURRENT: 435/69.7; 435/252.3, 435/320.1, 530/350,

536/23.4

Full Title Citation Front Review Classification Date Reference MMC Draw Desc Image

30. Document ID: US 5738852 A

L7: Entry 30 of 30 File: USPT Apr 14, 1998

DOCUMENT-IDENTIFIER: US 5738852 A

TITLE: Methods of enhancing antigen-specific T cell responses

DATE-ISSUED: April 14, 1998

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Robinson; William S.

Palo Alto CA

Chu; Keting

Palo Alto CA

US-CL-CURRENT: 424/199.1; 424/278.1, 424/93.2, 435/320.1,

514/44

Full Title Citation Front Review Classification Date Reference

ENAC Drawn Desc Image

Generate Collection

	Documents	
AAV near5 retrovir\$ near5 vector\$ and packaging near cell\$	30	

Display

100 Documents, starting with Document: 30

Display Format:

Change Format

aumaumaumaumaumaumaun.	WEST

End of Result Set

Generate Collection

L3: Entry 1 of 1

File: USPT

Jul 22, 1997

DOCUMENT-IDENTIFIER: US 5650309 A

TITLE: Viral vectors

DEPR:

The term "biologically active nucleic acid sequence" refers to a nucleic acid which has the property of encoding or possessing a property which directs or permits an activity in a host cell. For instance, the nucleic acid optionally encodes proteins or catalytic nucleic acids which act upon the nucleic acid or the host cell upon transcription and/or translation and/or has sequences necessary for chromosomal integration into the host cell's genome, nucleic acid origins of replication, and sequences which permit packaging of the nucleic acid into a viral capsid.

DEPR:

The vectors are useful for introducing anti-viral genes into cells, and for spreading the anti-viral genes to other cells within a host upon infection by a virus or a class of viruses. The vectors have a genome containing a cellular transduction portion and an anti-viral portion. The cellular transduction portion contains sequences for integrating the vector into a host chromosome, and optionally contains additional sequences, such as those necessary for packaging the vector into a virus particle. In preferred embodiments, the cellular transduction portion of the virus does not replicate itself efficiently, requiring co-infection of the cell by a helper virus, or expression by the cell of viral regulators or components for productive infection. Any wild-type or modified viral genome which can incorporate the anti-viral portion can be used, AAV vectors are particularly preferred because they are able to encapsidate reasonably large amounts of DNA; they can be harvested and used in high concentrations for infection; they have no endogenous promoter activity, and they have no known mode of pathogenesis.

DEPR:

A replication defective rescuable genome of this invention can contain multiple defective genes. For example, Looney and Wong-Staal describe multiple gene mutants of HIV (PCT/US93/12088). Genes rendered inactive are capable of trans-complementation in order to render the construct rescuable. Genes which are not necessary for packaging may also be partially or completely deleted.

DEPR:

Functions of HIV replication not supplied by trans-complementation which are necessary for replication of the replication-defective portion of the vector are present in the replication-defective rescuable portion of the vector. This includes, e.g., the TAR sequence, the sequences necessary for HIV packaging, the RRE sequence if the instability elements of the p17 gene of gag is included, and sequences encoding the polypurine tract.

DEPR:

HIV sequences that contain these functions include a portion of the 5' long terminal repeat (LTR) and sequences downstream of the 5' LTR responsible for efficient <u>packaging</u>, i.e., through the major splice donor site ("MSD"), and the polypurine tract upstream of the 3' LTR through the U3R section of the 3' LTR. FIGS. 1 and 2 show the HIV genome and the location of relevant sequences.

DEPR:

The sequences necessary for <u>packaging</u> are located in the U5 portion of the 5' LTR and downstream of it into part of p17, as well as the U3R portion of the 3' LTR.

DEPR:

If anti-viral activity in any cell fails, the chimeric vector is designed to include a secondary protective function. Although the HIV portion of the vector is replication defective, it is rescuable by active HIV virus. Factors produced by the infective HIV supplement the replication functions missing from the vector. Consequently, the transduced cell transcribes the replication-defective HIV portion, interfering with the <u>packaging</u> of wild type HIV, and/or subsequently disseminating the anti-HIV genes contained within the replication-defective HIV portion of the vector to other target cells.